

**ARIZONA GAME AND FISH DEPARTMENT  
HABITAT PARTNERSHIP PROGRAM  
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

**PROJECT INFORMATION**

**Project Title:** Purchase of two (2) four-wheel drive water trucks for Department wildlife water delivery requests throughout the state.

**Project No.** 07-712

**Region/GMU:** Statewide

**HPC:**

**Project Type:** Maintenance of wildlife water developments throughout the state

**Project Description:**

The Development Branch of the Arizona Game and Fish Department (AGFD) is responsible to fill water hauling requests submitted primarily by Regional Wildlife Managers and Regional Wildlife Program staff during critical periods of hot, dry weather. Requests come in from all areas of the state, from the Arizona Strip country to the Yuma area; from the Sierra Vista area to the Show Low area. These requests traditionally begin in May and last through September. During this time period, much of the state's wildlife becomes dependent on water developments as their primary source for water. When water hauling requests are minimal, the use of water trucks is necessary to augment construction processes at newly constructed or redeveloped wildlife water developments.

**Wildlife Species to Benefit:** elk, deer, bighorn sheep, antelope, javelina, birds, as well as all species of wildlife

**Possible Funding Partners:** AGFD Development Branch would supply qualified CDL operators, and vehicle fuel, maintenance and operational costs.

**Implementation Schedule:**

Beginning: July 2008

Completed: June 2009

**PROJECT FUNDING**

**SBG Funds Requested:** \$280,000.00

**Cost Share Funds:** \$

**Total Project Costs:** \$280,000.00

**PARTICIPANT INFORMATION**

**Applicant:** Ed Jahrke

**Address:**

2221 W. Greenway Road  
Phoenix, AZ 85023

**Telephone:** (602) 789-3482

**AGFD Contact and Phone No.**

(If applicant is not AGFD personnel)

**Coordinated with:** N/A

Applicant's signature:



Date:

9/28/07

**SEND COMPLETED APPLICATIONS TO:**

**Game Branch  
2221 W. Greenway Rd.  
Phoenix, AZ 85023**

**NEED STATEMENT/PROBLEM ANALYSIS:**

The AGFD Development Branch hauls hundreds of thousands to millions of gallons of water annually to wildlife water developments to manage wildlife populations throughout the state. Most of the water is hauled during the hot, dry months when requested by Regional Wildlife Managers. Development Branch water trucks are also used during new and redevelopment construction of water catchments for several reasons including a water source to mix concrete; filling new systems to test catchment plumbing before it is buried or insulated and to pull trailers with catchment materials and tools. Water trucks are a vital piece of equipment to the Development Branch fleet to fulfill the Department's mission.

Currently, the Development Branch has eight water trucks in various states of repair and capability. Their ages range from 1996 to 2002, with four trucks being four-wheel drive and four trucks being two-wheel drive. Because of the demanding terrain in which these trucks regularly operate, four-wheel drive is required some 80% of the time. The two newest water trucks (each 2002) are four-wheel drive, and the two oldest trucks (one 1996, one 1997) are also four-wheel drive. All four of these vehicles have considerably higher mileages than the two-wheel drive trucks. Recently, the oldest four-wheel drive truck lost an engine, and a decision was made not to replace the engine because of the age and the worn-out condition of the vehicle. This was an especially critical decision because of the need for this vehicle in the program to maintain water hauling requests. Most of the other water trucks are in similar condition, needing constant repairs just to keep them on the road hauling water.

There is no regular replacement schedule for these vehicles compared to other Department vehicles because of their high cost and that they don't accumulate mileage as quickly. Occasionally, funding will be earmarked during Development Branch biennial budget planning, but by the time the money is loaded there either isn't enough funds to cover the continuously rising costs of these vehicles, or funding did not get loaded because of other budgetary considerations. In fiscal year 2007, there was supposed to be funding loaded for a water truck, but it was taken out before the budget was loaded, leaving no chance of replacing a truck this year.

The age and condition of this fleet of trucks continues to deteriorate. Current vehicle maintenance budgets allocated to repair these vehicles are exhausted well before the end of the fiscal year because of the extent of repairs required by older heavy equipment-type vehicles. As the Development Branch makes progress redeveloping catchments to larger capacities, it is hoped that water hauling demand will decrease. This expected result is still several years away and will only be true if drought conditions improve and normal rain fall resumes around the state.

**PROJECT OBJECTIVES:**

A). To purchase two four-wheel drive water trucks so that wildlife water haul requests will serviced in a timely manner, insuring management of wildlife populations that depend on AGFD and other land management agency water developments during the hot, dry months of the year.

B). To use these water trucks during new construction and redevelopment of wildlife water developments around the state, insuring that projects are built to Development Branch's Wildlife Water Development Standards.

**PROJECT STRATEGY:**

A). Encumber funds before the AGFD long-lead time delivery items deadline at the end of December 2008 to ensure that water trucks are delivered and available for the beginning of the water hauling season (May 2009).

**PROJECT LOCATION:** Statewide water development locations

**HABITAT DESCRIPTION:** Not applicable

**ITEMIZED USE OF FUNDS:** Each complete water truck (chassis cab, two-way radio, tank and plumbing) would cost between \$130,000.00 and \$140,000.00 at today's market price. Preference would be an International-brand super heavy duty four-wheel drive cab chassis single rear axle truck with a 1,700 -2,000 gallon epoxy-lined steel tank. The truck would be outfitted with the appropriate plumbing configuration and a power take-off (PTO) unit to allow both pumping and drafting to optimize any available water sources, as well as be able to deliver water to developments when pumping over long distances is necessary. A GPS unit would be included that could track the vehicles in the event that they break down or become stuck in remote locations and have no communications.

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

Personnel involved will be AGFD Development Branch employees.

**PROJECT MONITORING PLAN:**

Project completion report.

**PROJECT MAINTENANCE:**

Maintenance, operation and fuel costs to be provided by AGFD

**PROJECT COMPLETION REPORT TO BE FILED BY:** Ed Jahrke, Development Branch